Cumulative Effects Work Group
April 13, 2006 10:00 AM MDT

Participants: Mike George, NPS; Mary Uhl, NMED, Susan Johnson, NPS; Scott Bohning, EPA-9; Kevin Golden, EPA-8; Kevin Briggs, CDPHE-APCD; Chuck Machovec, CDPHE-APCD

Overview

The purpose of the conference call was to continue discussing background information on the emissions inventory and modeling analyses/studies that are available in the four corners area that would be useful in the 4CAQTF. Once this review is complete the workgroup will develop a work plan at the May 9 meeting in Farmington. Tom Moore (WRAP) was not available during the call to discuss WRAPs ongoing regional modeling and emissions inventory efforts, but an additional call is tentatively scheduled for May 1 to hear Tom's presentation. (The workgroup will be notified of the call on the task force web page shortly).

Discussion

Mary Uhl updated the group on the status of several NMED studies in the four corners area. Mary said that the State contracted with Environ several years ago to perform ozone modeling as a part of the regions Early Action Compact with EPA. As a follow up to that study the State has contracted with Environ to improve the area source emissions estimates and that effort is currently underway. New Mexico is also presently working with EPA Region 6 in monitoring summertime ozone and VOC concentrations. Mary also said that New Mexico is close to signing a contract with Giant for $213K to perform PSD increment modeling. The funding is part of an enforcement settlement with Giant. Mary will send the Giant proposal and a description of Environ's ongoing work to improve area source emissions to the workgroup.

Chuck Machovec made a presentation on the PSD increment modeling that the State conducted in the four corners area in 1999. The study was conducted to address the concerns of the State, EPA, and FLMs that the PSD Class 1 and II increments for NO2 might be threatened at Mesa Verde NP and surrounding areas due to rapid growth in area source emissions. The State used the Calpuff model with MM5 (80 km grid) to evaluate impacts from long range transport and the ISC model to evaluate local "hot spots" of Class II increment consumption. The study showed that based on 1997 emissions the PSD NO2 increment was not exceeded at Mesa Verde or in surrounding Class II areas. However a localized hotspot with potential Class II increment violations was found near a large compressor station on the Southern Ute Reservation. Subsequent EPA enforcement actions with the source have since resolved the potential PSD increment violations. Chuck indicated that there are a number of limitations to the study that the workgroup should keep in mind. These include 1) the fact that PSD increment consumption is a "moving target" based on current years emissions, and emissions in the region may have increased since that time; 2) the meteorological data used to drive the

model is sparse by current modeling standards, and 3) emissions information for many of the smaller sources was limited. The slides from Chucks presentation are contained on the workgroup website.

The group briefly discussed plans for the upcoming meeting in Farmington. The principal task at that meeting will be to formulate a workplan. To help resolve any questions the group may have it was suggested that technical representatives from Environ and the NPS be available by phone or in person at the meeting. Scott Bohning mentioned that the final technical work from the Desert Rock PSD application may be available by the time of the meeting.